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ABSTRACT

The results of studies of English adverb usage undertaken by Swedish university students participating in a research and writing skills program are summarized. The studies focus on the incidence of structural and semantic types of adjuncts used in two samples of spoken and written British English. Frequency distributions are charted and accompanied by a narrative analysis. The research projects have produced insights into the frequency and types of adjuncts used. Similar research into this and other adverb types would be useful. (MSE)

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IS THERE AN ADVERBIAL IN THIS TEXT? (AND IF SO, WHAT IS IT DOING THERE?)¹

1. Introduction

This paper is a preliminary report on a pilot study concerning the frequency and types of adverbials = semantic and structural = in two samples of spoken and written contemporary British English. It was carried out within the framework of the research project English in Speech and Writing and undertaken in part as a pedagogical experiment whose aim was to increase the productivity and writing skills of Swedish third-term undergraduates in the English department of Uppsala University. (Cf. Tottie et al 1983.) The pedagogical aspects of the experiment are accounted for elsewhere in this volume (Allenberg & Tottie). In what follows, I shall concentrate on the outcome of the scholarly endeavours of my students in the area of English adverbial usage. Of necessity, my goals were limited = firstly, by the amount of time allotted to the writing of term papers, and secondly, by the lack of sophistication of my aspiring but inexperienced assistant investigators.

The impetus of this work was David Crystal's article 'Neglected grammatical factors in conversational English', published in 1980 in Studies in English Linguistics for Randolph Quirk. Crystal's main point in this article is that careful empirical study of specimens of spoken language will prove certain grammatical factors to be "rather more central" notions than is usually pointed out in linguistic accounts (cf. *op cit*, p 161).

One of the "neglected categories" pointed to by Crystal is the class of adverbials, and he demonstrates their importance in terms of frequency and integration into clause structure, in a specimen of surreptitiously recorded spontaneous conversation.² Crystal shows that in his sample containing 420 clauses, 246, or 59%, contain an adverbial. If introductory clauses of the type He said... are excluded, the proportion rises to 66%. Crystal also shows that 170/420, or c 40% of the clauses have adverbials that are either syntactically or semantically obligatory, whereas the adverbials are optional only in about 20%. These proportions conflict with the usual treatment of adverbials in grammars, where they are mostly treated as optional elements of clause structure. On the basis of his findings, Crystal suggests that ling-

list clause structure could be better described by means of a rule of the form

Clause \rightarrow A + AP + AP

with optional deletion of the adverb phrase, than by the standard formulae not including APs.

One problem with Crystal's article is that although he convincingly shows the importance of adverbials in informal domestic conversation and thus amply supports the case for empirical study, there is no comparison with written material and thus no basis for a claim that adverbials = or indeed other grammatical factors = are more central in speech than in writing. Such a claim seems implicit in the title of the article. A comparison with written English is obviously imperative if we wish to substantiate either the claim that adverbials are more important in general in terms of frequency and integration into clause structure, or that they are more important in conversation than in written language.

Although there are many treatments of adverbs and adverbials in terms of semantic type, placement, etc., very few quantitative studies have been carried out.³ Ellegård 1978, in his study of the syntactic structure of a 128,000-word subset of the Brown Corpus of American English, does provide some interesting quantitative data, which can be summarized as in table 1:

	Type of adverbial	Major	Sentence	Manner	All catego-
Per 100 clauses	Clausal	13,9	-	,2	14,1
	Non-clausal	56	6,4	6,3	68,9
	Totals	69,9	6,4	6,7	83
Per 1000 words	Clausal	19,4	-	,3	19,7
	Non-clausal	78,6	8,9	9,0	96,5
	Totals	98	8,9	9,3	116,2

Table 1. The frequency of adverbials in 128 000 words of journalism, popular fiction, literary essays, and scientific text (in equal proportions) taken from the Brown Corpus. Cf. Ellegård 1978:31, 40 and 42, tables 2A, 15A and 15B.

Table 1 shows that there is, in Ellegård's material, an average of 68.9 non-clausal and 14.1 clausal adverbials per 100 clauses, or in all, 83 adver-

bials per 100 clauses. At first glance, then, it would seem as if there are, if anything, more adverbials per clause in written than in spoken material - of the 59 = 101 recorded by Crystal, but the comparison is problematic: first of all, Crystal speaks only of clauses that "contain an adverbial" (1980:161), but does not specify whether he means just one adverbial, or at least one adverbial, and of course there is no way of telling how the adverbials in Ellegård's material are distributed. Another problem is the heterogeneity of Ellegård's material, which contains one-quarter fiction with conversational passages. Probably of less importance is the fact that Ellegård's written material consists of American English, although ideally of course, specimens of the same variety should be compared. In spite of these problems, however, Ellegård's data can certainly be interpreted as supporting the hypothesis of the "importance" of adverbials in written as well as spoken English.

Another interesting question about which little seemed to be known was the relation between adverbial meaning and structure. Quirk et al (1972:420), after pointing out that adverbial functions can be realized by a range of structures, go on to say: "Although it is true that some adverbial functions can be realized by the whole range of structures, others are chiefly realized by only certain structures." However, although there are scattered references to the quantitative relationship between the function and form of adverbials (esp pp 420f, 471, and 753), Quirk et al give no precise statements concerning frequencies of types, and nothing is said about differences between spoken and written English.

If we wish to study the distribution of structural and semantic types of adverbials in conversation and written English, we get no help from Crystal, this being outside the scope of his article, and only limited information from Ellegård, who provides only the distinctions shown in table 1, viz into clausal and non-clausal, and into major, sentence, and manner adverbials. Gustafsson 1982, who works with exactly the same material as Ellegård, provides a detailed subclassification of adverbials into semantic and functional categories based on Quirk et al 1972, ch 8, but as Gustafsson's concern is with topicalization, she gives data on fronted adverbials only, and we cannot assume that the same distributions hold for fronted adverbials as for adverbials in general.

It thus seemed worthwhile to make a comparative study of adverbials in spoken and written English with regard to their frequency and the distribution of structural and semantic types. Spontaneous conversation and informative prose were chosen as prototypical of each variety (cf Tottie et al 1983: 4f). British English was chosen as the target variant because of the availa-

bility of the London-based Corpus of Spoken English (LSC) and the London-based Corpus of Written English (LCW), the particular texts used for this study were taken from the "Mini" corpora selected for the research project English in Speech and Writing (see Lottje et al 1983:12 and 80). The research was organized to fit into a one-term undergraduate seminar in the Department of English at Uppsala University. (cf Alexander & Lottje, this volume), where each student was to spend five weeks in all on their papers. Each student analysed 5000 words of spoken English and 5000 words of written English. At the moment of writing, five students have completed their work, and the material to be accounted for in what follows thus covers 50 000 words, or 25 000 words of each variety, drawn from the following texts:⁴

LSC: S, 1.1, 1.7, 1.8, 1.9, 1.11

LCW: B texts (Press: editorial) 01, 07, 09, 15, 17

C text (Press: reviews) 01

F texts (Popular lore) 01, 21, 11

G texts (Belles lettres, biography, essays) 01, 03, 17, 23

The classification of adverbials is an over-tempting task even to experienced linguists, and in order to make the undertaking at all feasible to my students, I had to make a number of simplifications. We based our classifications mostly on Quirk & Greenbaum 1973, with some admixture of the typology of Sauerbrik & Sager 1978, those being the grammars that the students were familiar with. Like Crystal and Fillegård, we limited our investigation to cover adverbials as clause constituents, excluding modifiers. Thus, examples of type (1) were included, but not those of type (2):

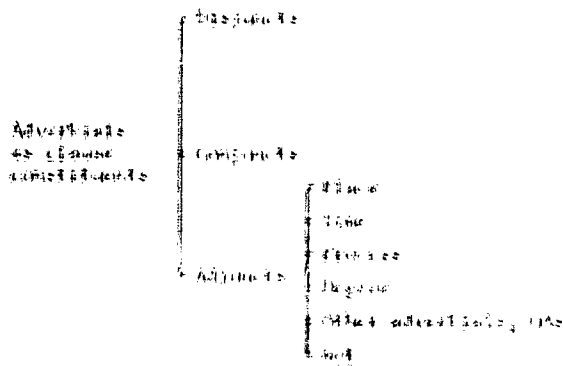
(1) He frightened me terribly.

(2) I was terribly frightened.

However, comparative clauses were regarded not as modifiers but as adverbials, in contrast to Fillegård (1978:50) and Quirk et al (1972:733). Adverbial particles as parts of phrasal verbs were not included.

We decided to count disjuncts, conjuncts and adjuncts, but to make a detailed study only of the adjuncts. This category was further subclassified into the semantic categories of place, time, process (including manner and instrument adverbials as well as subject adjuncts), and degree. To these we added a ragbag category of 'other adjuncts', OAs for short, a cover term for adjuncts of purpose, cause, concession, comparison, and a small number of really difficult cases. This measure was adopted partly out of necessity, partly because these types were not numerically significant if taken indi-

（附註）此項工程，係由本局委託設計，並由本局撥款，由該局負責施工，其工程費，由該局負責撥付，其工程進度，由該局負責監督，其工程質量，由該局負責檢查，其工程安全，由該局負責保障，其工程環境，由該局負責保護，其工程社會，由該局負責協調，其工程經濟，由該局負責控制，其工程文化，由該局負責傳承，其工程藝術，由該局負責創造，其工程科學，由該局負責探索，其工程技術，由該局負責研發，其工程教育，由該局負責普及，其工程健康，由該局負責促進，其工程體育，由該局負責推廣，其工程娛樂，由該局負責豐富，其工程旅遊，由該局負責開發，其工程交通，由該局負責改善，其工程通訊，由該局負責加強，其工程能源，由該局負責節約，其工程環境，由該局負責保護，其工程社會，由該局負責協調，其工程經濟，由該局負責控制，其工程文化，由該局負責傳承，其工程藝術，由該局負責創造，其工程科學，由該局負責探索，其工程技術，由該局負責研發，其工程教育，由該局負責普及，其工程健康，由該局負責促進，其工程體育，由該局負責推廣，其工程娛樂，由該局負責豐富，其工程旅遊，由該局負責開發，其工程交通，由該局負責改善，其工程通訊，由該局負責加強，其工程能源，由該局負責節約。

[illegible][illegible][illegible]

One of the greatest problems we faced was choosing the unit of analysis against which to judge the frequency of advertisements. Clearly, an experiment designed working with a very limited material, analyzed his specimens of conversation into clauses, we would have liked to follow that but had to abandon the procedure simply because the students found it so difficult to make decisions concerning the spoken material that achieving any kind of uniform clause analysis of our much larger material would have taken up too much of the available time. Instead, we had to resort to the method of relating the occurrence of advertisements to the total number of words examined. This is an expedient measure, and interesting per se, but it tells us nothing of the ratio of advertisements per clause.

Another problem was to decide how to count advertisements. One policy was item

[illegible]

Figure 1. The effect of the concentration of the inhibitor on the rate of polymerization.

[illegible]

(H) ~~the~~, ~~the~~ ~~the~~ ~~the~~ ~~the~~

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10-11-68

[illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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[illegible]

1. 2019年12月31日，公司总资产为1,000,000,000.00元，净资产为500,000,000.00元。

（全图） 比例尺 1:100000 图例 说明 注记 比例尺 1:100000 图例 说明 注记

(21) 月半後 年終前此係月 此係月半前 此係月半後 此係月半前 此係月半後

[illegible][illegible][illegible]

2. Results and discussion

1. The frequency of adjectives.

The total frequency of adverbials of all types, conjuncts, disjuncts, and adjuncts (not being accounted for separately) in the spoken and written corpora (S and W) is shown in table 2.⁵

[illegible]

১. কৃষক : কৃষকরা কৃষি করে এবং এতে আয়ের অধিকাংশ অংশই খরচ করে।
 ২. কৃষক : কৃষকরা কৃষি করে এবং এতে আয়ের অধিকাংশ অংশই খরচ করে।

[illegible]

[illegible][illegible][illegible]

9

[illegible]

	1970	1975	1980	1985	1990	1995
1970-1975	1970	1975	1980	1985	1990	1995
1975-1980	1975	1980	1985	1990	1995	2000
1980-1985	1980	1985	1990	1995	2000	2005
1985-1990	1985	1990	1995	2000	2005	2010
1990-1995	1990	1995	2000	2005	2010	2015
1995-2000	1995	2000	2005	2010	2015	2020

Table 1. The frequency and proportion of children's exposure to television in the United States, 1970-2000. The frequency of exposure is measured by the number of hours per week that children are exposed to television. The proportion of exposure is measured by the percentage of children who are exposed to television. The data are based on the results of the National Longitudinal Survey of Children and Youth (NLSY) and the National Longitudinal Survey of the Youth (NLSY97).

	1970	1975	1980	1985	1990	1995
1970-1975	1970	1975	1980	1985	1990	1995
1975-1980	1975	1980	1985	1990	1995	2000
1980-1985	1980	1985	1990	1995	2000	2005
1985-1990	1985	1990	1995	2000	2005	2010
1990-1995	1990	1995	2000	2005	2010	2015
1995-2000	1995	2000	2005	2010	2015	2020

Table 2. The frequency and proportion of children's exposure to television in the United States, 1970-2000. The frequency of exposure is measured by the number of hours per week that children are exposed to television. The proportion of exposure is measured by the percentage of children who are exposed to television. The data are based on the results of the National Longitudinal Survey of Children and Youth (NLSY) and the National Longitudinal Survey of the Youth (NLSY97).

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My research resulted in improving knowledge of the history of English language standards, particularly in the area of curriculum development.

Table 1 shows the progression of research and development of the curriculum standards. The research was conducted in a number of ways, including the use of interviews, focus groups, and document analysis. The research was conducted in a number of ways, including the use of interviews, focus groups, and document analysis. The research was conducted in a number of ways, including the use of interviews, focus groups, and document analysis.

	Phase 1		Phase 2		Phase 3		Phase 4		Phase 5	
	1	2	3	4	5	6	7	8	9	10
1st	100	100	100	100	100	100	100	100	100	100
2nd	100	100	100	100	100	100	100	100	100	100
3rd	100	100	100	100	100	100	100	100	100	100
4th	100	100	100	100	100	100	100	100	100	100
5th	100	100	100	100	100	100	100	100	100	100
6th	100	100	100	100	100	100	100	100	100	100
7th	100	100	100	100	100	100	100	100	100	100
8th	100	100	100	100	100	100	100	100	100	100
9th	100	100	100	100	100	100	100	100	100	100
10th	100	100	100	100	100	100	100	100	100	100

Table 2 shows the results of the research and development of the curriculum standards. The research was conducted in a number of ways, including the use of interviews, focus groups, and document analysis.

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selection from text S.1.1): 45% in S, 42% in W. Prepositional phrases (like at the moment, after that, from the twenty-ninth of June, to the eighth of July /S.1.1/) are runners-up: 24% in S, 36% in W. Noun phrases (next year, last Wednesday, this week... /S.1.1/) are proportionately more frequent in S than in W: 20% vs 7%. Finite clauses account for low but similar proportions in S and W: 10% vs 9% (cf examples like when we were setting that kind of question /S.1.1.1176/, while those questions survive /S.1.1.1071/...). Non-finite clauses are, again, unusual in both varieties, though proportionately more frequent in W (4%) than in S (1%). Verbless clauses are at the bottom of the list: .4% in either variety.

About 85% of all process adjuncts are realized by either adverb phrases (like voluntarily, heavily, sharply, effectively... /B15/) or prepositional phrases (like by means of restrictions, without racial discrimination, with an air of triumph... /B 15/) in S as well as in W. APs are in the majority in both varieties, although in somewhat different proportions (61% APs in S, 49% in W, compared with 27% PPs in S, 37% in W). All other structural types are represented, noun phrases and non-finite clauses being more common than finite or verbless clauses (6% NPs in S, 5% in W, 4% NFCs in either variety).

Adjuncts of degree are mostly realized by adverb phrases in S as well as in W (83% and 79%, respectively), the rest being mostly prepositional phrases (7% in S, 17% in W) and noun phrases (9% in S, 3% in W). Clausal degree adverbials were almost entirely absent: only a single instance (1%) occurred in W.

The "other adjuncts" are mostly realized by either adverb phrases or finite clauses (38% APs in S and 32% in W, 41% FCs in S, and 33% in W). The proportion of prepositional phrases is about the same in S and W (12% and 13%, respectively). NPs are rare: 1% in S and 4% in W. If we look at the total of clausal OAs, including non-finite and verbless clauses, we see that they account for 48% of all OAs in S, and 50% in W. There is thus a strong - and expected - correlation between the semantic category of adjuncts expressing cause, concession, condition, and comparison, and clausal form.

This correlation is brought out even more strongly by table 7, which shows the proportions of semantic categories distributed over the structural types of adjuncts. Again, the reader is referred to table 3 for actual frequencies. Table 7 shows that finite clauses are used almost exclusively as either time adjuncts or as OAs (30% vs 65% in S, 21% vs 71% in W). Typical examples are if he lives to see his Utopia come true, once the British employment market begins to reach saturation point /B 15/. Non-finite clauses are used as time and process adjuncts, but occur especially in OA function (18%, 20%, and 60%,

	AP		PP		NP		PC		NFC		VLC	
	S	W	S	W	S	W	S	W	S	W	S	W
Place	22%	11%	63%	59%	10%	11%	4%	1%	2%	6%	-	1%
Time	32%	32%	22%	20%	70%	48%	30%	21%	18%	21%	27%	13%
Process	12%	23%	7%	13%	6%	16%	1%	5%	20%	12%	18%	13%
Degree	20%	11%	2%	2%	11%	4%	-	.5%	-	-	-	-
OAs	14%	23%	6%	7%	2%	21%	65%	71%	60%	61%	55%	69%
n	1096	619	841	841	220	85	262	202	45	101	11	16

Table 7. The distribution of semantic categories over structural types of adjuncts in S and W.

respectively, in S, and 21%, 12% and 61% in W). When set beside the existing structure /B 07/, by asking us to value old music /G 42/, and ... the liquidation of the firm to pay death duties /B 07/ are examples from our corpus. Similar proportions hold for verbless clauses (27% time, 18% process, and 55% OAs in S, compared with 13% time, 13% process, and 69% OAs in W). It should be remembered, however, that the total number of verbless clauses is very low, which means that these proportions must be regarded with some caution.

If we look at the other structural categories, we see that adverb phrases are the most versatile type: although they mostly function as time adjuncts (32% in S as well as in W), they occur in between 10 and 20% in all functions; cf table 7 for details. Prepositional phrases and noun phrases, on the other hand, each favour one particular semantic category: PPs occur mostly as realizations of place adjuncts (63% in S, 59% in W), and much less frequently as any other type. Time adjuncts (22% in S, 20% in W) are the most frequent ones among the other categories, and except for 13% process adverbials in W, there is a mere sprinkling (2 - 7%) of the other types.

Noun phrases occur mostly as time adjuncts, this tendency being most pronounced in S (70%, compared with 48% in W) and obviously due to the abundance of expressions like next week, this afternoon, this year, etc. (This is corroborated by research at the Survey of English Usage; Randolph Quirk, personal communication.). NPs also serve as place adjuncts in similar proportions in S and W (10% vs 11%). The other semantic categories are realized by NPs to very different extents: There are 6% process adjuncts in S but 16% in W, 11% degree adjuncts in S but 4% only in W, and 2% OAs in S, but 21% in W. Notice, however, that the W proportions here are based on a much lower

number of instances than S, or 85 vs 220, and that the percentages may therefore be somewhat uncertain.

3. Conclusions and prospects

We may sum up the results of our investigation as follows: In our two samples of 25 000 words each of spoken and written English, S and W, adverbials were more frequent in S than in W: 136.5 per 1000 words in S, compared with 89.5 in W. At least in part, this difference could be due to the higher incidence of disjuncts and negative expressions in S. Table 2 shows that the frequency of not is higher in S than in W, and we have reason to suspect that other negative expressions are also more frequent in S than in W - cf Tottie 1982:89f. Whether there are also more adverbials per clause in S than in W remains to be established, pending a breakdown of our material into clauses.

The proportions of structural and semantic types are mostly similar in S and W, but there are some differences. Adverbs and adverb phrases and prepositional phrases are the most common types in S as well as W, together accounting for almost 80% of all adjuncts in either variety, but APs dominate in S (44%) and PPs in W (45%) - cf table 5. Finite clauses represent 11% of the total in S as well as in W; NPs are more important in S (9%) than in W (5%). Non-finite and verbless clauses occur in low proportions (5% or less) in both varieties, but are twice as frequent in W as in S (cf table 5). These findings are supported by ongoing research at the Survey of English Usage (Randolph Quirk, personal communication).

Most adjuncts express location in time or space (about 60% in both varieties), place adjuncts being somewhat more frequent than time adjuncts. Process adjuncts are more important in W (15%) than in S (9%), whereas the reverse is the case with degree adjuncts. Expressions of cause, concession, condition, etc, account for c 17% of the adjuncts in either variety. As Crystal points out (1980:165), these data may be compared with studies concerning language acquisition by children, where expressions of time and, especially, place are shown to be acquired at an early stage. The studies quoted by Crystal are supported by Strickland 1962 (English) and Valiquette 1978 (French), quoted by Dubuisson et al 1981. The need for "locating language in time and space" is obviously present from an early stage and continues to make itself felt in adults.⁷

As I stressed at the outset, this is a preliminary report. The time limitations imposed on our study precluded an exhaustive analysis even of those adverbials, i.e. the adjuncts, that we paid most attention to, and the material we already have at hand would certainly yield valuable insights if examined more closely. The most obvious target for further research would of

course be the motley category of "other adverbials", which needs to be broken down into more well-defined semantic types. It would be particularly interesting to study the distribution of the various clausal OAs to ascertain the frequencies of causal, conditional, and concessive relations in spoken and written language (to the extent of course that these relations are expressed by means of adverbials, clausal or not).⁸ A detailed examination of the adjuncts of time, place, process, and degree would certainly also be rewarding. Within the limited space at my disposal here, it has only been possible to account for structural types in the most general terms of frequencies and proportions, and to illustrate these by thin sprinklings of actual linguistic examples. It would presumably be revealing to study the actual lexical items which constitute these structures to determine important semantic substructures. Thus it is obvious that e.g. place adjuncts can be divided into different types expressing either location at a point in space or direction to or from one, and it would certainly be interesting to find out how these types are distributed in spoken and written language, as well as the proportions and types of deictics (here, there) vs more specific adverbials (on the table, in London). A number of the items classified as place adjuncts also seem to have a "metaphorical" or abstract meaning, e.g. at this point, in this connexion. It would be interesting to know the extent to which such expressions occur, as well as possible differences between spoken and written language.

Finally, we left the major categories of disjuncts and conjuncts unaccounted for - a closer look at these would certainly be rewarding.

In addition to studying types of adverbials in detail, it would also be interesting to know what proportion of written or spoken text is likely to consist of adverbials. The preceding account has only dealt with adverbials in terms of the frequency of individual items, but not with their length. We did keep track of this factor, however, and moreover, we classified adverbials at different "levels". Adverbials are frequently embedded in other adverbials, as in (11):

(11) After finishing early that Monday, John left.

LEVEL 2

LEVEL 1

It would be vacuous and misleading to state merely that this seven-word sentence contains eight words of adverbials (which it does, counting the when-clause, early, and that Monday as separate units). We therefore decided to classify adverbials at two levels (cf Ellegård's notion of "depth", 1978:26 ff), level one consisting of adverbials not contained in other adverbials, and level two comprising adverbials within adverbials. When we analyze these data,

we will be able to establish what proportion of the total amount of text consists of adverbials by including only level one items.

What I have been able to show in this article is thus merely the tip of an iceberg. However, I am confident that further empirical research in the area of adverbial usage will prove fruitful and yield insights both into the workings of the English language as a whole, and of spoken and written varieties. These insights promise to be of linguistic, pragmatic, and psychological interest, increasing our knowledge of usage and use and giving us information concerning the constraints on language production and processing in different communicative situations.

NOTES

1. I am grateful to Professor Randolph Quirk for reading an early draft of this paper and then graciously giving me access to some unpublished results of ongoing research at the Survey of English Usage, University College London, concerning adverbial usage. I am also deeply indebted to Bengt Altenberg for penetrating comments on many vital points, and for interesting discussions of method as well as matter. Most of all, I wish to thank my students, Monica Berggren, Christina Carlsson, Marie Fagerberg, Karin Hammarstig, Marita Johansson, and Ann-Charlotte Sandberg, for contributing enthusiasm and hard work to this project. Any remaining inadvertencies are my own responsibility.
2. The material used consists of texts 1, 3, and 8 from Crystal and Davy 1975, a total of thirteen minutes of conversation. After removing 120 minor sentences and comment clauses, Crystal was left with 420 clauses to analyze for the purposes of his 1980 paper. Cf Crystal 1980:156, fn 2.
3. See e.g. Bartsch 1972, Greenbaum 1969, Jacobson 1964 and 1978. Kramsky 1975 examines the frequency of occurrence of adverbs in fiction, plays and "special" (i.e. scientific) style but attempts no full coverage of the functional category of adverbials.
4. LLC texts are 5000 words long, LOM texts 2000 words long. Only the first half of B 07 was included.
5. S and W refer to the samples used for this study, and the terms spoken and written English are used for general reference. Although it is difficult to make explicit claims concerning the representativity of our corpora or subsamples, it seems reasonable to assume that extrapolation from our samples is possible.
6. Notice that the frequencies per 1000 words given for negatives in Tottie 1982 are higher than the not frequencies in table 2 because they comprise a wider range of items.
7. The fact that Dubuisson et al 1981 found a majority of manner adverbials in their elicited French data must be due to the fact that they asked their subjects to write down rules for games.
8. Many of these relations can of course be expressed by other means, e.g. parataxis. Cf Altenberg, in press.

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